

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul A. Harrity on 18 December 2009.

The application has been amended as follows:

Please amend claim 10 as follows:

10. (currently amended) A system comprising:

a device comprising:

means for identifying an implicitly defined semantic structure associated with terms in a document, where a ~~number~~plurality of rules are associated with the implicitly defined semantic structure, and where the semantic structure includes a list including a header and a plurality of items associated with the header;

means for determining a location relationship between a pair of the terms within the list;

means for selecting one of the ~~number~~plurality of rules, as a selected rule, corresponding to the location relationship;

where a first rule of the ~~number~~plurality of rules is determined to correspond to the location relationship when the first term is located in one

of the plurality of items and the second term is located in a different one of the plurality of items;

where a second rule of the ~~number-plurality~~ of rules, different than the first rule, is determined to correspond to the location relationship when the first term is located in one of the plurality of items and the second term is located in the same one of the plurality of items; and

where a third rule of the ~~number-plurality~~ of rules, different than the first rule and the second rule, is determined to correspond to the location relationship when the first term is located in the header and the second term is located in one of the plurality of items;

means for determining a distance value between the pair of terms using a function that is based on the selected rule, where the function differs based on whether the selected rule is the first rule, the second rule, or the third rule;

means for generating a ranking score for the document based on the distance value; and

means for outputting the ranking score.

Please amend claim 12 as follows:

12. (currently amended) A method performed by one or more server devices, comprising:

identifying, using a processor of the one or more server devices, a semantic structure associated with terms in a plurality of documents, where a ~~number-plurality~~ of

rules are associated with the semantic structure, and where the semantic structure includes a list including a header and a plurality of items associated with the header;

locating, using a processor of the one or more server devices, a first term and a second term occurring within the list;

selecting, using a processor of the one or more server devices and based on a relationship of the locations of the first and second terms, at least one of the ~~number~~ plurality of rules, as a selected rule, to be used in determining a distance value between the first and second terms;

where a first rule of the ~~number~~ plurality of rules is selected when the first term is located in one of the plurality of items and the second term is located in a different one of the plurality of items,

where a second rule of the ~~number~~ plurality of rules, different than the first rule, is selected when the first term is located in one of the plurality of items and the second term is located in the same one of the plurality of items, and

where a third rule of the ~~number~~ plurality of rules, different than the first rule and the second rule, is selected when the first term is located in the header and the second term is located in one of the plurality of items;

determining, using a processor of the one or more server devices when the first and second terms occur in a search query, the distance value, between the first and second terms within the semantic structure, using a function that is based on the selected rule, where the function differs based on whether the selected rule corresponds to the first rule, the second rule, or the third rule;

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ranking, using a processor of the one or more server devices, the documents for relevancy to the search query based on the determined distance value; and

outputting, using a processor of the one or more server devices, the rankings of the documents in response to the search query.

Please amend claim 22 as follows:

22. (currently amended) A device comprising:

a memory; and

a processor[[:]] coupled to the memory[[:]] and configured to:

identify a semantic structure associated with a first term and a second term occurring in a document, where a plurality of rules are associated with the semantic structure, and where the semantic structure includes a list having a header and a plurality of items associated with the header;

determine a semantically based distance relationship between the first term and the second term in the identified semantic structure;

select one of the plurality of rules, as a selected rule, that corresponds to the distance relationship;

where the processor is to select a first rule of the plurality of rules when the first term is located in one of the plurality of items and the second term is located in a different one of the plurality of items,

where the processor is to select a second rule of the plurality of rules, different than the first rule, when the first term is located in one of

the plurality of items and the second term is located in the same one of the plurality of items, and

where the processor is to select a third rule of the plurality of rules, different than the first rule and the second rule, when the first term is located in the header and the second term is located in one of the plurality of items;

determine, using a function based on the selected rule, a semantically based distance value between the first term and the second term, where the first term and the second term occur in a search query, and where the function differs based on whether the selected rule corresponds to the first rule, the second rule, or the third rule;

rank the document for relevancy to the search query based on the semantically based distance value; and
provide at least some of the ranks in response to the search query.

Please amend claim 23 as follows:

23. (currently amended) The device of claim 22, where the processor is further configured to:

locate implicitly defined semantic structures in the document; and
use the implicitly defined semantic structures in determining the semantically based distance value.

Please amend claim 24 as follows:

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24. (currently amended) The device of claim 22, where the processor is further configured to:

receive the search query.

Please amend claim 25 as follows:

25. (currently amended) A memory device containing computer-executable instructions, the memory device comprising:

one or more instructions ~~to that~~ receive a search query;

one or more instructions ~~to that~~ identify an implicitly defined semantic structure associated with terms in documents, where a plurality of rules are associated with the implicitly defined semantic structure, and where the semantic structure includes a list having a header and a plurality of items associated with the header;

one or more instructions ~~to that~~ determine a semantic-based distance relationship between a first term and a second term within the list;

one or more instructions ~~to that~~ select one of the plurality of rules, as a selected rule, based on the semantic-based distance relationship between the first and second terms within the implicitly defined semantic structure;

where a first rule of the plurality of rules is selected when the first term is located in one of the plurality of items and the second term is located in a different one of the plurality of items,

where a second rule of the plurality of rules, different than the first rule, is selected when the first term is located in one of the plurality of items and the second term is located in the same one of the plurality of items, and

where a third rule of the plurality of rules, different than the first rule and the second rule, is selected when the first term is located in the header and the second term is located in one of the plurality of items;

one or more instructions ~~to that~~ determine, using a function based on the selected rule, a distance value for the first and second terms, where the function differs based on whether the selected rule corresponds to the first rule, the second rule, or the third rule;

one or more instructions ~~to that~~ rank the documents for relevancy to the search query based on the distance value; and

one or more instructions ~~to that~~ present the documents in an order influenced by the ranking.

Please amend claim 28 as follows:

28. (currently amended) The memory device of claim 25, further comprising:
- one or more instructions ~~to that~~ locate explicitly defined semantic structures.

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob F. Bétit whose telephone number is (571)272-4075. The examiner can normally be reached on Monday through Friday 9:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Mahmoudi can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jacob F B  tit/
Examiner, Art Unit 2169

jfb
20 Dec 2009